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ABSTRACT

Students enrolled in elementary French at grade 8 of the Ontario school system were tested to determine whether a lengthening of the daily session devoted to French from 20 to 40 minutes resulted in increased proficiency. Data make it apparent that increasing the amount of instructional time has produced a significant improvement in students' linguistic skills. The trend of the data is for students who have had more instruction to be more positive in their attitude toward learning French and less anxious about participating actively in their French classes. Increased instructional time, however, did not produce either a more favorable attitude toward French Canadians or increase students' knowledge of the French culture. Data developed from monitoring the adequacy of program implementation indicate that the observed differences in student achievement cannot be attributed to changes in the general quality of instruction. (Author/JB)

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ELEMENTARY FRENCH PROGRAM EVALUATION: THE EFFECT OF 40 vs. 20 MINUTES PER DAY IN GRADE 8

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Research Report 79-12

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ELEMENTARY FRENCH PROGRAM EVALUATION: THE EFFECT OF 40 vs. 20 MINUTES PER DAY IN GRADE 8

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London Board of Education

Since major changes in the elementary French program (Jutras and Gillin, 1976), involving both increased instructional time and a significant shift in emphasis, are to be introduced over the next several years, an evaluation plan was developed to assess the impact of these changes. An earlier report (Stennett and Isaacs, 1979) was directed toward assessing the effect of additional instructional time in French on grade 8 students' achievement in English and Mathematics. The current study was designed to assess the effects of increasing the amount of instructional time devoted to French in grade 8 from 20 to 40 minutes daily on students' acquisition of French language skills.

METHOD

Sampling and Testing Procedures

In order to limit both the number of students required for the evaluation and also the amount of time any one student would be required to spend completing tests, three successive random sampling strategies were used. First, using a computer-based procedure, all elementary schools (major units) were randomly assigned to one of five groups.[1] One of these

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[1]Subsequent statistical comparisons of these five groups of schools demonstrated that they were equivalent with respect to the student-characteristic dimensions used in the formula to allocate Learning Resource Teachers (Stennett & Isaacs, 1977).

groups of schools was then selected for study. Second, within this group of 10 schools, 15 grade 8 classes were randomly selected to produce a sample of approximately 400 students. Finally, two subsamples of approximately 150 students each were randomly selected from the 400 to receive individually administered tests.

In keeping with the requirements of a successive-cohort design, the grade 8 classes selected for study during 1977-78 and 1978-79 were drawn from the same group of schools. Class and student selection were, of course, done randomly within each academic-year cohort.

All French language achievement and attitude tests, whether individual or group, were administered by specially-trained teachers. Results of the grade 7 system-wide administration of the Canadian Test of Basic Skills (CTBS) and Dominion Test of Learning Capacity (DTLC) were obtained from files maintained by the Measurement, Evaluation and Computer Application Service.

Although data were collected on all students sampled, only the data for students who had been exposed to the 'standard' French program were used for making statistical tests. That is, for the 1977-78 grade 8 cohort, only students who had 20 minutes/day of French instruction in both grades 7 and 8 were included; for the 1978-79 cohort, only students who had 20 minutes/day in grade 7 and 40 minutes/day in grade 8 were used.

Table 1 gives the number of students in each cohort who received each of the various tests used in this study. Relatively smaller numbers of students were given the Speaking and Aural-Oral tests because these tests are administered individually and 'scored' from tape-recordings and are, therefore, very expensive.

Data Analyses

Data analyses for this study are complicated by two facts: (1) different groups of students were administered different combinations of tests, and (2) despite random sampling procedures, some pre-instructional differences between the two cohorts of students (which could confuse interpretation of the findings) did appear. For these reasons the results will be presented separately for each set of tests taken by a common group of students. In addition, the comparability of students comprising the tests-in-common groups will be assessed separately and suitable statistical corrections for pre-instructional differences made as indicated.

Finally, because not all students received all tests, examination of the relationships among students' scores on the various tests is limited.

RESULTS

Reading

The data contained in Table 2 provide a comparison of the 1977-78 and 1978-79 grade 8 students with respect to some key dimensions which might be expected to produce differences in their reading test performance. Data are included only for those students who had the 'standard' program in grades 7 and 8.

It is apparent from these data that, although the two groups do not differ in terms of either sex or academic ability, the 1978-79 group did enter grade 8 with a significantly better record of academic achievement. This difference could be expected to produce a difference in their performance on the French Reading test. Therefore, in order to assess the impact of increased time devoted to French instruction on reading

achievement, with adjustments made for the initial differences in academic achievement, an analysis of covariance test was employed using students' total average standard score on the grade 7 CTBS test as the covariate.

Table 3 gives a percentage frequency distribution of students' IEA Population I French Reading Test scores. It is quite evident from these data that the performance of the 1978-79 grade 8 students is substantially better than that of the 1977-78 group. For example, the percent of students having scores of 21 or better is 52.6 for the 1977-78 group and 81.9 for the 1978-79 group.

The analysis of covariance test indicated that the difference in average score between the two groups, adjusted for initial differences in academic achievement, was statistically very significant. This difference in adjusted means (25.33 - 21.96 = 3.37) represents an overall improvement of about 15%.[2]

Appendix A gives the percents of each group of students giving each response to each of the 35 items on the IEA French Reading test. Figures for the correct response to each item are presented in italics. The interested reader may review these data to determine in more detail the nature or character of the improvement in performance made by the 1978-79 grade 8 students.

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[2]A commonly employed criterion is that an effect, to be educationally significant, should involve a change of at least .25 of a standard deviation. This difference in adjusted means represents a change of approximately .61 of a standard deviation.

Listening

The data of Table 4 provide a comparison of the 1977-78 and 1978-79 grade 8 students with respect to some key dimensions which might be expected to produce differences in their Listening Test performance. Data are included for only those students who had the 'standard' French program.

It is apparent from these data that the two groups of students do not differ on sex or academic achievement. The 1978-79 group, however, does appear to have slightly less academic ability. The observed difference between the two groups in Listening Test scores, therefore, may tend to represent a slight under-estimate of the real program effect.

Table 5 gives a percentage frequency distribution of students' IEA Population I French Listening Test scores. It is evident from these data that the performance of the 1978-79 grade 8 students is substantially better than that of the 1977-78 group. For example, the percent of students having scores of 19 or better is 25.5 for the 1977-78 group and 44.9 for the 1978-79 group.

The ANOVA test result indicates that the difference between the mean Listening Test scores of the two groups is very significant. The difference in means (18.05 - 15.99 = 2.06) represents an overall improvement of about 13%. This is equivalent to an improvement of .48 of a standard deviation and represents an 'educationally significant' change.

Appendix B gives the percents of each group of students giving each response to each of the 35 items on the IEA French Listening Test. Figures for the correct response to each item are presented in italics. The interested reader may review these data to determine in more detail

the nature or character of the improvement in performance made by the 1978-79 grade 8 students.

Speaking

The data contained in Table 6 allow comparisons of the 1977-78 and 1978-79 grade 8 students who took the IEA Population I Speaking Test with respect to sex, academic achievement and academic aptitude. It is apparent from these data that the two groups of students are quite similar.

For Population I level students the IEA Speaking Test consists of three subtests: *Pronunciation* - a measure of 'the ability to pronounce French with acceptable phonology'; *Structural Control* - the 'ability to select appropriate vocabulary and syntax to answer questions about simple but controlled situations', and *Fluency* - 'the quantity and quality of a student's response in French when he was asked to speak somewhat more at length in describing sequences of events or pictured situations' (Carroll, 1975).

Students' responses to this test were tape-recorded and rated by two French teachers.[3] The two teachers were given sufficient practise, by jointly scoring and re-scoring the same student records, to ensure that their ratings were both consistent and comparable.

Pronunciation. In this test the student simply repeats a short sentence he hears from a tape recorder. His tape-recorded responses are subsequently rated (correct or incorrect) in terms of the accuracy with

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[3]Mrs. Roseanne McKay and Mrs. Lise Cerny

which specific elements are reproduced. Appendix C gives the percent of students in each grade 8 cohort who reproduced each element correctly.

Percentage frequency distributions of students' scores on the Pronunciation Test are given in Table 7. The mean number of elements correctly reproduced by the 1978-79 grade 8 students (7.38) is not significantly greater statistically than that of the 1977-78 group (6.96).

Structural Control. In this test students were required to respond verbally with a single sentence in French to each of ten questions presented in French by means of a tape-recorder. In formulating each of their answers, students were able to rely on a picture which provided suitable content for each question. The first test question was "Qu'est-ce que c'est?" (Picture of a fish in a bowl); the last test question was "Qu'est-ce qu'il y a sur la table?" (Picture of a chef cutting up vegetables.)

Students' answers for each question were scored using the following scale:

0 - no response, 'yes' or 'no', inappropriate or unintelligible response;

1 - an accumulation of serious errors *or* one serious error accompanied by one or more minor errors;

2 - one serious error *or* an accumulation of minor errors;

3 - one or two minor errors, and

4 - completely correct.

Since there were 10 items, the maximum possible score is 40. The percents of students in each grade 8 cohort receiving each rating for their response to each of the ten questions are presented in Table 8.

The average score for the 1978-79 grade 8 class (3.23) while quite low represents a substantial improvement over the average score obtained by the 1977-78 grade 8 class (1.30). This difference is very significant both statistically and educationally (.44 of a standard deviation).

Fluency. The IEA Population I Fluency Test requires the student to produce a series of sentences in response to one of two line-drawings. After looking at the picture of his choice for one minute, the student is told to start speaking and the first 30 seconds of his response are tape-recorded.

Scoring of a student's response involves counting:

(a) the number of intelligible clauses

(b) the number of different grammatical structures

(c) the number of clauses correct in structure

(d) the number of clauses correct in morphology (inflection)

(e) the number of clauses correct in vocabulary, and

(f) the number of clauses correct in pronunciation.

Using these figures, three summary scores are calculated, as follows:

Fluency Quantity Score = 2b + 2c + d + 2e + 2f

Fluency Quality Score = [6c + 3d + 6e + 6f] /a

Total Fluency Score = Quality Score + Quantity Score.

When variable 'a', the number of intelligible clauses, is zero all of these three scores, of course, become zero.

Table 9 gives the percents of students in each grade 8 cohort receiving scores of 0 to 9 on each of the six variables used to calculate the Fluency Quality, Quantity and Total Scores. Table 10 gives a percentage

frequency distribution of Fluency Quality, Quantity and Total Scores, separately for each grade 8 cohort.

The average scores for the 1977-78 and 1978-79 cohorts for the Fluency Quantity Score are 4.76 and 7.07 respectively. This difference is both statistically ($p < .05$) and educationally significant (.21 standard deviation units).

The average Fluency Quality Scores for the 1977-78 and 1978-79 cohorts are 4.77 and 5.23, respectively. This difference is not statistically significant.

The Total Fluency Scores for the two cohorts (9.57 and 12.33) are not significantly different.

Aural-Oral

These tests, developed as part of the Alberta Modern Language Study and modified for use locally, are designed to approximate real life situations as closely as possible. The tests are given individually and all verbal interactions are tape-recorded for subsequent scoring.

The data of Table 11 permit comparisons of the 1977-78 and 1978-79 grade 8 students who took the Aural-Oral tests with respect to sex, academic achievement and academic aptitude. Statistical tests indicate that the two cohorts do not differ significantly on any of these variables.

Aural Comprehension Without Visual Cues. In this test the student is asked nine questions in French and can give his responses in English. His response to each question is scored as either correct or incorrect.

Table 12 lists the questions asked and gives, separately for each cohort, the percent of students answering each correctly. The average

number of items correct was 2.12 for the 1977-78 cohort and 2.92 for the 1978-79 group. This difference, though small, is statistically very significant and, representing an increase of .38 of a standard deviation, is educationally significant.

Aural Comprehension With Visual Cues. In this test the student is shown a picture and asked 7 questions in French about it. He must respond in French. His answers are scored using the following scale:

0 - no response or incorrect

1 - correct but limited answer, and

2 - correct and phrased in sentence form.

Table 13 lists the 7 questions and gives, for each, the percents of students' responses rated 0, 1 or 2, separately for each grade 8 cohort. Since there were 7 items, the total possible score is 14. The average score for the 1977-78 grade 8 cohort was 3.16 and, for the 1978-79 cohort, 3.99. This difference both statistically ($p < .05$) and educationally significant (.30 standard deviation units).

Task Completion. In this test students were asked, imagining that the examiner did not speak English, to either ask a question or give information in French. Students' responses to each of the 11 items on this test were examined to yield two subscores - a Communication Score and a Structure Score.

Communication. The Communication Score was simply the number of items the student completed satisfactorily enough to be understood... regardless of the adequacy of his French grammar, pronunciation, etc.

The total possible Communication Score was, therefore, 11.

Table 14 lists the 11 items on this test and gives the percent of students receiving credit for each, separately by grade 8 cohort. The average number of items rated satisfactory was 3.84 for the 1977-78 cohort and 5.27 for the 1978-79 cohort. This difference is both statistically ($p < .01$) and educationally significant (.49 standard deviation units).

Structure. The Structure Score was calculated by simply counting, for each item, the number of relevant structures present in the student's response. The percents of students having various numbers of structures present in their responses to each item of the Task Completion Test are presented, separately by cohort, in Table 15. Since there were a total of 42 structures, the total possible score was 42. The average score for the 1977-78 students was 16.08 and, for the 1978-79 students, 20.38. This difference is both statistically ($p < .01$) and educationally significant (.52 standard deviation units).

Cultural Awareness & Attitudes

The data of Table 4 provide a comparison of the 1977-78 and 1978-79 grade 8 students with respect to some key dimensions which might be expected to produce differences in their scores on the Cultural Awareness and Attitude Scales. Data are included for only those students who had the 'standard' French program.

Cultural Awareness. The responses of the two groups of students on the items making up the Survey of French Cultural Awareness are summarized in Table 16. Similar data for a sample of 250 Carleton students who had received a daily 20-minute period of French instruction from Kinder-

garten to grade 8 are also provided for purposes of comparison.

It is apparent from these data, and confirmed by an ANOVA test, that there is no difference in the performance of the 1977-78 and 1978-79 grade 8 students on the Cultural Awareness Test.

Attitudes. The responses of the 1977-78 and 1978-79 grade 8 students to the items comprising the three attitude scales are summarized in Appendices D, E and F. The mean attitude scale scores of the two London grade 8 groups, plus those of grade 7 students in a national sample described by Gardner, Smythe and Smythe (1974), are given in Table 17. Although statistical tests indicate no significant difference in mean score for any of the three attitude scales, the shift toward lower scores on the French Class Anxiety scale approaches statistical significance... indicating that the 1978-79 students were less anxious about participating actively in their French classes than were the 1977-78 students. One should also note that, for both groups of London students, their mean scores place them slightly toward the positive end of the other two scales.

Program Monitoring

In order to evaluate the impact of changes in the French curriculum it is necessary to document the nature of the program and teachers' success in implementing it. This was done by having the coordinator of the French program or an assistant[4] visit all of the grade 8 classes under study during both 1977-78 and 1978-79.

During these visits a monitoring form, designed by Mr. Jutras, was completed which provided information on such things as the length and

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[4]Mr. G. Jutras and Mr. R. Gillin

frequency of French classes, classroom atmosphere, methods used, etc. Ratings on these various dimensions were summarized into a global rating of program implementation adequacy. A statistical comparison of these ratings for the 1977-78 and 1978-79 classes indicated both that the program was implemented satisfactorily and also that the adequacy of implementation was similar in both years. The differences in student achievement, therefore, cannot be attributed to differences in the general quality of instruction during the two years under study.

SUMMARY

Table 18 summarizes the differences between the grade 8 classes of 1977-78 and 1978-79 with respect to their scores on the various tests of French achievement, cultural awareness and attitude. It is quite apparent from these data that increasing the amount of instructional time in grade 8 from 20 to 40 minutes/day has produced a significant improvement in students' linguistic skills.

The trend of the data is also for the students who have had more instruction to be more positive in their attitude toward learning French and less anxious about participating actively in their French classes.

Increased instructional time, however, did not produce either a more favourable attitude toward French Canadians or increase students' knowledge of the French culture.

Data developed from monitoring the adequacy of program implementation indicates that the observed differences in student achievement cannot be attributed to changes in the general quality of instruction.

REFERENCES

Carroll, J. B. The Teaching of French as a Foreign Language in Eight Countries. Stockholm: International Association for the Evaluation of Educational Achievement (IEA). Uppsala, Almquist & Wiksell Tryckeri AB, 1975.

Gardner, R. C., Smythe, C. L. & Smythe, P. C. The Language Research Group Cross-National Survey: Normative Data, 1973-74. University of Western Ontario. Research Bulletin No. 3, December, 1974.

Jutras, G. & Gillin, R. New Directions in French Instruction in the Schools of the Board of Education for the City of London. Board of Education, London, Ontario, 1976 (mimeo).

Parker, D. V. The Alberta Modern Language Study. University of Alberta, Faculty of Education, 1976 (mimeo).

Stennett, R. G. & Isaacs, Lorna. Learning Resource System: Development and Application of a Resource Allocation Formula. Board of Education, London, Ontario, 1977. Research Report 77-08.

Stennett, R. G. & Isaacs, Lorna. Elementary French Program Evaluation: Impact of Increased Time for French on Achievement in English and Mathematics. Board of Education, London, Ontario, 1979. Research Report 79-05.

TABLE 1 Number of Students in Each Grade 8 Cohort Receiving Various Tests

Test	Cohort	
	1977-78 Grade 8	1978-79 Grade 8
Canadian Test of Basic Skills	250	270
Dominion Test of Learning Capacity	217	254
Prior French Instruction Questionnaire	423	452
I.E.A. French Reading (Pop. I)	152	176
I.E.A. French Listening (Pop. I)	271	276
I.E.A. French Speaking	106	122
Alberta Modern Language Study: French Aural-Oral Test	103	111
Survey of French Cultural Awareness	264	214
French Class Anxiety Scale	260	219
Attitude Toward French Canadians	260	219
Attitude Toward Learning French	260	219

TABLE 2 Statistical Comparison of the 1977-78 and 1978-79 Samples of Grade 8 Students Who Had the 'Standard' French Program and Were Given the I.E.A. Population I Reading Test.

Variable		1977-78	1978-79	ANOVA*
Number of Cases		152	176	
Sex (%)	Male	50.0	47.2	n.s.
	Female	50.0	52.8	
Grade 7 C.T.B.S. Mean S.S.	Usage	58.89	62.87	p<01
	Math	58.76	61.85	p<01
	Total Average	59.26	62.15	p<01
D.T.L.C. Mean IQ		106.36	107.60	n.s.
Second Language at Home?	% No	85.5	88.6	
	% Yes, Not French	13.8	10.9	
	% Yes, French	.7	.6	

*Figures in this column give the results of Analysis of Variance (ANOVA) tests comparing the two groups of students. N.S. means the difference is not statistically significant. P<01 means that the observed difference could appear by chance less than once in one hundred times, i.e., it is statistically very significant.

TABLE 3 Percentage Frequency Distribution of I.E.A. Population I Reading Test Scores for Students in the Grade 8 Classes of 1977-78 and 1978-79 Who Had the 'Standard' French Program

Score Interval	1977-78			1978-79		
	Number of Cases	Percent	Cumulative Percent	Number of Cases	Percent	Cumulative Percent
0 - 5	1	.7	99.9			
6 - 10	2	1.3	99.2			
11 - 15	25	16.4	97.9	6	3.4	99.5
16 - 20	44	28.9	81.5	25	14.2	96.1
21 - 25	43	28.3	52.6	48	27.3	81.9
26 - 30	28	18.4	24.3	64	36.4	54.6
31 - 35	9	5.9	5.9	32	18.2	18.2
Totals	152	99.9		176	99.5	
Mean	21.14			25.91		
S.D.	5.71			5.37		
Adjusted Means	21.96			25.33		

TABLE 4 Statistical Comparison of the 1977-78 and 1978-79 Samples of Grade 8 Students Who Had the 'Standard' French Program and Were Given the I.E.A. Population I Listening Test.

Variable		Cohort				ANOVA
		77-78 Grade 8		78-79 Grade 8		
		N	%	N	%	
Sex	Male	134	49.3	139	50.2	n.s.
	Female	138	50.7	137	49.5	
C.T.B.S. Mean Standard Scores	- Usage	61.5		62.2		n.s.
	- Math	60.5		61.7		n.s.
	- Total	61.3		61.6		n.s.
Mean DTLC IQ		110.1		108.1		p<05
Second Language at Home:						
- No		231	85.2	231	83.4	
- Yes, not French		40	14.8	43	15.5	
- Yes, French		0	0.0	3	1.1	

TABLE 5 Percentage Frequency Distribution of I.E.A. Population I French Listening Test Scores for Students in the Grade 8 Classes of 1977-78 and 1978-79 Who Had the 'Standard' French Program.

Score Interval	1977-78			1978-79		
	Number of Cases	Percent	Cumulative Percent	Number of Cases	Percent	Cumulative Percent
0 - 6	4	1.5	100.0	0	0.0	99.9
7 - 12	48	17.7	98.5	29	10.5	99.9
13 - 18	150	55.3	80.8	123	44.5	89.4
19 - 24	65	24.0	25.5	101	36.6	44.9
25 - 30	4	1.5	1.5	21	7.6	8.3
31 - 35	0	0.0	0.0	2	0.7	0.7
Totals	271	100.0		276	99.9	
Mean	15.99			18.05		
S.D.	3.90			4.62		
ANOVA	$p<01$					

TABLE 6 Sex, Academic Achievement and Academic Aptitude of the 1977-78 and 1973 79 Grade 8 Students Who Had the 'Standard' French Program and Took the I.E.A. Population I Speaking Test.

Variable		1977-78	1978-79	ANOVA
Number of Students		107	122	-
Sex (%)	- Male	49	52	n.s.
	- Female	51	48	
Grade 7 CTBS Mean Standard Scores	- Usage	60.8	61.9	n.s.
	- Math	59.9	62.6	$p<05$
	- Total Average	60.9	61.9	n.s.
DTLC Mean IQ		109.5	107.7	n.s.

TABLE 7 Percentage Frequency Distribution of Pronunciation Test Scores for the Grade 8 Students of 1977-78 and 1978-79 Who Had the 'Standard' French Program.

Score Intervals	Group					
	1977-78			1978-79		
	Number of Cases	Percent	Cumulative Percent	Number of Cases	Percent	Cumulative Percent
0 - 9	2	1.9	99.9	5	4.1	100.0
10 - 12	4	3.8	98.0	10	8.2	95.9
13 - 15	19	17.9	94.2	29	23.8	87.7
16 - 18	33	31.1	76.3	33	27.0	63.9
19 - 21	31	29.2	45.2	35	28.7	36.9
22 - 24	17	16.0	16.0	8	6.6	8.2
>24	0	0.0	0.0	2	1.6	1.6
Totals	106	99.9		122	100.0	
Means	6.96			7.38		

TABLE 8 Percents of Students in the Grade 8 Cohorts of 1977-78 and 1978-79 Receiving Each Possible Rating for Their Response to Each of the Ten Items Making Up the I.E.A. Structural Control Test.

Rating*	Cohort	Items									
		3	4	5	6	7	8	9	10	11	12
0	77-78	85	88	81	94	86	57	95	82	90	90
	78-79	*56*	*78*	*52*	*89*	*57*	*52*	*64*	*78*	*73*	*70*
1	77-78	4	5	8	1	3	18	0	5	4	5
	78-79	*21*	*2*	*28*	*2*	*12*	*15*	*3*	*15*	*17*	*22*
2	77-78	7	1	6	2	6	10	2	4	5	5
	78-79	*4*	*2*	*17*	*3*	*24*	*8*	*5*	*3*	*3*	*3*
3	77-78	2	4	6	3	5	4	3	7	0	1
	78-79	*10*	*8*	*3*	*4*	*3*	*14*	*17*	*3*	*3*	*4*
4	77-78	3	3	0	0	1	11	0	3	2	0
	78-79	*9*	*11*	*10*	*3*	*5*	*11*	*12*	*1*	*5*	*1*

*0 = no response, 'yes' or 'no', inappropriate or unintelligible response
1 = an accumulation of serious errors *or* one serious error accompanied by one or more minor errors
2 = one serious error *or* an accumulation of minor errors
3 = one or two minor errors
4 = completely correct

TABLE 9 Percents of Students in Each Grade 8 Cohort Receiving Scores of 0 to 9 on the Six Variables Used to Calculate the Fluency Quality, Quantity and Total Scores.

Number of...	Cohort	Student Score									
		0	1	2	3	4	5	6	7	8	9+
Intelligible Clauses	77-78	26	32	26	11	1	3				1
	78-79	*20*	*25*	*29*	*12*	*7*	*2*	*4*	*1*		
Different Structures	77-78	24	20	22	9	12	7	3	1	1	1
	78-79	*17*	*12*	*10*	*18*	*16*	*7*	*8*	*3*	*3*	*6*
Clauses Correct In Structure	77-78	29	33	24	9	1	3			1	
	78-79	*22*	*31*	*26*	*9*	*7*	*3*	*3*	*1*		
Clauses Correct In Morphology	77-78	44	34	15	5	2	1				
	78-79	*46*	*22*	*21*	*6*	*4*	*2*				
Clauses Correct In Vocabulary	77-78	39	32	19	8	1	1				1
	78-79	*36*	*26*	*22*	*9*	*3*	*3*	*2*	*1*		
Clauses Correct In Pronunciation	77-78	37	35	18	7	3		1			
	78-79	*38*	*29*	*17*	*11*	*3*		*3*			

TABLE 10 Percentage Frequency Distribution of Students' Fluency Quantity, Quality and Total Scores by Grade 8 Cohort.

Score Range	Fluency Scores					
	Quantity		Quality		Total	
	1977-78	1978-79	1977-78	1978-79	1977-78	1978-79
0	26	21	26	21	26	21
1 - 5	3	3	1	0	0	0
6 - 10	26	19	8	17	2	2
11 - 15	11	7	22	26	2	5
16 - 20	17	19	24	26	7	4
21 - 25	3	11	19	9	8	10
26 - 30	8	10	1	1	20	11
31 - 35	2	0			10	12
36 - 40	3	4		1	8	12
41 - 45		3			8	7
46 - 50		0			7	4
>50	1	4			4	12
Average	12.11	16.26	12.13	11.96	24.34	28.28
N Cases	107	121	107	121	107	121

TABLE 11 Sex, Academic Achievement and Academic Aptitude of the 1977-78 and 1978-79 Grade 8 Students Who Had the 'Standard' French Program and Took the Aural-Oral Test.

Variable		1977-78	1978-79	ANOVA
Number of Students		103	111	-
Sex (%)	- Male	50	50	n.s.
	- Female	50	50	
Grade 7 CTBS Mean Standard Scores	- Usage	62.6	62.6	n.s.
	- Math	61.1	60.9	n.s.
	- Total Average	62.2	61.8	n.s.
DTLC Mean IQ		112.0	114.8	n.s.

TABLE 12 Percents of Students in Each Grade 8 Cohort Responding Correctly to Each of the Nine Questions on the Test of 'Aural Comprehension Without Visual Cues'.

Question	% of Students Responding Correctly	
	1977-78	1978-79
1. Comment s'appelle le président Américain?	47.6	66.7
2. Quelle est l'addresse de ton école?	24.3	40.5
3. Combien font seize et quatre?	1.9	17.1
4. En quelle saison est Noël?	26.2	36.9
5. Est-ce que tu as beaucoup de frères?	13.6	18.0
6. Quel âge est-ce que tu as?	28.2	41.4
7. Est-ce que son père est très grand?	17.5	22.5
8. Est-ce qu'il fait froid en été?	35.0	15.3
9. À quelle heure est-ce que tu prends ton petit déjeuner?	12.6	33.3

TABLE 13 Percents of Students' Responses Rated 0, 1 or 2 For Each of the 7 Questions on the 'Aural Comprehension With Visual Cues' Test, Separately by Grade 8 Cohort.

Question	Cohort	Rating*		
		0	1	2
1. Combien de garcons et de filles est-ce qu'il y a?	1977-78	76	20	4
	1978-79	*61*	*26*	*12*
2. Qu'est-ce que la jeune fille porte?	1977-78	85	4	11
	1978-79	*81*	*6*	*13*
3. Qu'est-ce que les enfants font ici?	1977-78	96	2	2
	1978-79	*78*	*9*	*13*
4. Est-ce que la maison est grande?	1977-78	35	22	43
	1978-79	*37*	*38*	*25*
5. Où sont les arbres?	1977-78	99	1	0
	1978-79	*87*	*8*	*5*
6. Quel temps fait-il?	1977-78	62	3	35
	1978-79	*45*	*18*	*37*
7. De quelle couleur est la neige?	1977-78	47	36	18
	1978-79	*32*	*51*	*17*

*0 = no response or incorrect
1 = correct but limited answer
2 = correct and phrased in sentence form

TABLE 14 Percents of Students Receiving a Satisfactory Communication Rating for Each of the 11 Items on the Task Completion Test, Separately for the 1977-78 and 1978-79 Grade 8 Students.

Item	% of Students Receiving Satisfactory Rating	
	1977-78	1978-79
1. Ask me where the washroom is.	31	41
2. Ask me if I speak French.	55	64
3. Tell me that there are 15 boys in your class.	26	33
4. Tell me you have brown shoes.	12	21
5. Tell me that it's very hot today.	55	52
6. Ask me if I watch TV.	26	58
7. Tell me that you don't sing.	48	58
8. Tell me how old you are.	42	56
9. Tell me when Christmas is.	24	28
10. Ask me if my house is small.	35	61
11. Tell me that you eat a lot.	25	51

TABLE 15 Percents of 1977-78 and 1978-79 Students Receiving Various Possible Structure Scores for Each of the 11 Items on the Task Completion Test.

Item	Maximum Possible Score	Cohort	Scores Received						
			0	1	2	3	4	5	6
1	4	77-78	47	13	19	5	17		
		78-79	*32*	*14*	*15*	*22*	*17*		
2	3	77-78	18	23	17	42			
		78-79	*13*	*16*	*25*	*46*			
3	6	77-78	27	9	18	18	20	8	0
		78-79	*18*	*8*	*14*	*22*	*22*	*12*	*5*
4	4	77-78	33	37	21	9	0		
		78-79	*23*	*36*	*27*	*12*	*3*		
5	4	77-78	26	17	37	18	3		
		78-79	*26*	*21*	*32*	*19*	*3*		
6	4	77-78	19	31	25	17	8		
		78-79	*12*	*10*	*17*	*31*	*31*		
7	2	77-78	44	27	29				
		78-79	*37*	*26*	*37*				
8	3	77-78	27	49	9	16			
		78-79	*14*	*31*	*26*	*29*			
9	5	77-78	12	23	22	25	16	2	
		78-79	*14*	*14*	*26*	*31*	*14*	*3*	
10	5	77-78	18	19	25	29	8	0	
		78-79	*14*	*7*	*19*	*39*	*16*	*5*	
11	2	77-78	63	32	5				
		78-79	*35*	*38*	*27*				

TABLE 16 Percent of London 1977-78, London 1978-79 and Carleton Students Responding Correctly to Each Item on the Survey of French Cultural Awareness.

Item	London 77-78 (N=264)	London 78-79 (N=214)	Carleton (N=250)
Items pertaining to France:			
28. Bastille Day	60	68	70
6. Caviar	28	23	22
17. Tour de France	48	41	60
24. Champs Elysées	49	46	40
21. President	17	17	21
Average Percent	*40.4*	*39.0*	*42.6*
International French			
16. Language for 80 Million	24	21	22
18. Second Language - Algeria	24	25	23
4. La Marseillaise - St. Pierre	33	23	32
Average Percent	*27.0*	*23.0*	*25.7*
Canada: Non-Quebec			
3. % Francophone Canadians	52	50	51
8. St. Boniface	30	32	29
1. French Newspapers	44	44	91
30. War 1750's & 60's (7 Year)	43	49	49
25. Acadians	43	40	48
Average Percent	*42.4*	*43.0*	*53.6*
Canada: Quebec			
7. Quebec - Asbestos	53	59	50
2. French Greeting	48	56	30
5. St. Jean Baptiste	53	52	72
15. Grade 8 - Last Elementary Grade	36	37	26
22. Felix Leclerc - Chansonnier	26	23	28
23. Woven Sash - Dancing	43	47	38
29. Dollard des Ormeaux	23	17	26
20. Pork Pie	46	56	45
19. Felix Leclerc - Song Writer	38	31	22
26. René Levesque	78	82	88
27. Father, Family Blessing	71	67	66
9. CEGEP	39	46	42
10. St. Catharine's Day	29	28	26
11. Quebec - Farm Fields	65	60	54
12. Winter Sports Carnival	87	90	83
13. Gabrielle Roy	26	27	23
14. Wood Carving	35	39	42
Average Percent	*46.8*	*48.1*	*44.8*
Mean Number of Items Correct/30	*13.85*	*13.85*	*13.70*

TABLE 17 Mean Scores on Three Attitude Scales for the Grade 8 Classes of 1977-78 and 1978-79 and Grade 7 Students in a National Sample.

Attitude Scale	Group			ANOVA London Samples
	National Sample Grade 7	London Grade 8 1977-78	London Grade 8 1978-79	
Attitude Toward Learning French	44.9	39.7	41.7	n.s.
Attitude Toward French Canadians	45.8	43.5	43.4	n.s.
French Class Anxiety	20.1	20.0	18.8	n.s.

TABLE 18 Summary of Differences in Test Scores for the Grade 8 Classes of 1977-78 and 1978-79.

Tests	Mean Scores Cohort 77-78	Mean Scores Cohort 78-79	Diff. Between Means in.... Raw Score Units	Diff. Between Means in.... S.D. Units	ANOVA Test
Reading	21.96	25.33	3.37	.61	$p<.01$
Listening	15.99	18.05	2.06	.48	$p<.01$
Speaking:					
- Pronunciation	6.96	7.38	.42	.05	n.s.
- Structural Control	1.30	3.23	1.93	.44	$p<.01$
- Fluency: Quantity	4.76	7.07	2.31	.21	$p<.05$
Quality	4.77	5.23	.46	.06	n.s.
Total	9.57	12.33	2.76	.15	n.s.
Aural-Oral:					
Aural Comprehension:					
-Without Visual Cues	2.12	2.92	.80	.38	$p<.01$
-With Visual Cues	3.16	3.99	.83	.30	$p<.05$
Task Completion:					
-Communication	3.84	5.27	1.43	.49	$p<.01$
-Structure	16.08	20.38	4.30	.52	$p<.01$
Cultural Awareness	13.85	13.85	0.00	.00	n.s.
Attitudes:					
Attitude Toward French Canadians	43.51	43.42	-0.09	.01	n.s.
Attitude To Learning French	39.66	41.67	2.01	.12	n.s.
French Class Anxiety	20.05	18.84	1.21	.17	n.s.

APPENDIX A

Percents of Students Giving Each Response to Each Item of the IEA Reading Test for the Grade 8 Student Samples of 1977-78 and 1978-79.

Item	1977-78 Response[a]				1978-79 Response				Diff. in % Passing
	A	B	C	D	A	B	C	D	
1	9.9	10.6	*53.6*	25.2	5.7	3.4	*75.4*	15.4	21.8
2	6.7	16.7	12.7	*64.0*	8.6	10.9	4.6	*76.0*	12.0
3	*59.6*	23.2	2.6	14.6	*97.7*	1.7	0.6	0.0	38.1
4	21.3	5.3	*64.7*	8.7	9.7	6.3	*79.4*	4.6	14.7
5	14.8	*67.8*	13.4	4.0	9.7	*74.9*	14.3	1.1	7.1
6	3.9	*82.9*	0.7	12.5	1.1	*95.5*	0.6	2.8	12.6
7	8.0	26.0	27.3	*38.7*	1.7	10.2	16.5	*71.6*	32.9
8	*86.2*	4.6	7.9	1.3	*93.2*	0.6	6.3	0.0	7.0
9	*34.4*	16.6	15.9	33.1	*23.1*	21.4	19.1	36.4	-11.3
10	*53.4*	8.8	21.6	16.2	*68.4*	8.8	15.2	7.6	15.0
11	17.6	*64.2*	12.8	5.4	13.2	*69.0*	6.3	11.5	4.8
12	*54.4*	13.4	6.0	26.2	*77.1*	4.0	5.1	13.7	22.7
13	*51.0*	11.3	9.3	28.5	*74.4*	0.0	4.5	21.0	23.4
14	6.6	9.3	*78.8*	5.3	2.8	17.0	*73.9*	6.3	-4.9
15	*54.2*	16.7	9.7	19.4	*72.8*	11.6	6.9	8.7	18.6
16	9.3	*78.8*	4.0	7.9	5.1	*92.0*	0.6	2.3	13.2
17	*70.2*	6.6	5.3	17.9	*71.8*	4.6	13.2	10.3	1.6
18	4.0	*85.3*	6.0	4.7	2.3	*92.6*	2.8	2.3	7.3
19	11.4	18.1	19.5	*51.0*	3.5	11.6	28.9	*56.1*	5.1
20	17.4	8.7	14.8	*59.1*	5.7	4.6	11.4	*78.3*	19.2

[a] *Italicized figures are those for the correct response.*

Continued --

APPENDIX A - Continued

Item	1977-78 Response				1978-79 Response				Diff. in % Passing
	A	B	C	D	A	B	C	D	
21	5.3	*64.7*	6.0	24.0	3.4	*80.7*	3.4	12.5	16.0
22	39.7	13.2	3.3	*43.7*	14.9	10.3	2.9	*72.0*	28.3
23	17.2	*73.5*	4.0	5.3	9.2	*85.1*	3.4	2.3	11.6
24	*76.2*	12.6	7.9	3.3	*83.9*	10.3	3.4	2.3	7.7
25	1.3	2.0	3.3	*93.4*	3.4	3.4	1.1	*92.0*	-1.4
26	30.5	14.6	*47.7*	7.3	15.7	11.0	*59.9*	13.4	12.2
27	43.2	4.7	*45.3*	6.8	21.0	3.4	*70.5*	5.1	25.2
28	4.6	21.9	5.3	*68.2*	3.4	21.1	0.6	*74.9*	6.7
29	*55.7*	13.4	3.4	27.5	*63.4*	8.6	2.9	25.1	7.7
30	3.3	*56.0*	14.0	26.7	0.6	*69.9*	10.8	18.8	13.9
31	9.3	*56.7*	10.7	23.3	1.1	*53.4*	3.4	42.0	-3.3
32	*60.8*	4.1	18.2	16.9	*78.9*	3.4	12.0	5.7	18.1
33	22.8	*40.9*	7.4	28.9	10.3	*56.6*	5.1	28.0	15.7
34	10.0	4.7	12.7	*72.7*	4.5	3.4	4.0	*88.1*	15.4
35	8.3	33.1	24.1	*34.5*	9.2	17.9	16.2	*56.6*	22.1

APPENDIX B

Percents of Students Giving Each Response to Each Item of the IEA Listening Test for the Grade 8 Student Samples of 1977-78 and 1978-79.

Item	1977-78 Response*				1978-79 Response				Diff. in % Passing
	A	B	C	D	A	B	C	D	
1	21.8	8.9	*65.7*	3.7	15.0	9.1	*73.0*	2.9	7.3
2	2.6	16.3	47.0	*34.1*	0.7	15.0	36.9	*47.4*	13.3
3	*30.0*	33.7	13.7	22.6	*24.7*	40.6	5.2	29.5	-5.3
4	8.9	6.3	18.1	*66.7*	4.7	6.2	17.5	*71.6*	4.9
5	33.2	*20.1*	28.7	17.9	33.5	*24.6*	22.8	19.1	4.5
6	8.1	29.3	*40.0*	22.6	8.8	21.2	*39.2*	30.8	-.8
7	15.1	11.1	*66.1*	7.7	9.8	5.5	*79.3*	5.5	13.2
8	51.5	*25.9*	9.3	13.3	46.4	*26.6*	7.7	19.3	.7
9	8.5	46.9	20.7	*24.0*	7.3	43.1	16.4	*33.2*	9.2
10	11.8	44.3	10.3	*33.6*	4.7	49.1	8.4	*37.8*	4.2
11	8.9	23.7	36.3	*31.1*	6.6	30.3	27.7	*35.4*	4.3
12	10.5	20.6	27.3	*41.6*	16.0	21.6	24.5	*37.9*	-3.7
13	10.5	17.3	*57.9*	14.3	9.9	20.4	*54.0*	15.7	-3.9
14	38.1	11.9	*19.3*	30.7	58.0	15.3	*15.3*	11.3	-4.0
15	21.2	*46.1*	19.3	13.4	24.5	*41.4*	20.5	13.6	-4.7
16	*84.5*	7.4	4.4	3.7	*84.3*	7.7	5.1	2.9	-.2
17	*27.0*	9.3	36.7	27.0	*34.3*	5.8	42.0	17.9	7.3
18	4.8	34.8	6.7	*53.7*	2.9	29.1	2.2	*65.8*	12.1
19	10.0	*67.2*	11.8	11.1	6.2	*73.8*	6.2	13.8	6.6
20	24.9	8.9	20.4	*45.7*	18.1	11.1	15.2	*55.6*	9.9

**Italicized figures are those for the correct response.*

Continued --

APPENDIX B - Continued

Item	1977-78 Response				1978-79 Response				Diff. in % Passing
	A	B	C	D	A	B	C	D	
21	5.9	24.2	*69.9*	0.0	6.2	16.7	*76.0*	1.1	6.1
22	2.6	*84.1*	3.0	10.4	0.4	*92.0*	0.4	7.3	7.9
23	29.6	15.4	16.1	*39.0*	24.1	8.0	15.7	*52.2*	13.2
24	6.7	8.5	*75.6*	9.3	10.9	3.3	*78.1*	7.7	2.5
25	19.4	*23.5*	16.8	40.3	8.8	*35.3*	11.0	44.9	11.8
26	9.3	*55.2*	13.7	21.9	13.9	*58.6*	11.0	16.5	3.4
27	*59.3*	14.8	23.0	3.0	*58.2*	19.6	18.9	3.3	-1.1
28	55.8	4.5	*30.9*	8.9	30.2	9.1	*54.2*	6.5	23.3
29	*39.4*	33.5	12.6	14.5	*50.4*	35.0	9.9	4.7	11.0
30	4.9	29.2	*44.6*	21.3	7.1	20.1	*54.1*	18.7	9.5
31	17.6	10.5	*51.3*	20.6	12.0	4.7	*65.5*	17.8	14.2
32	22.8	*25.5*	12.0	39.7	19.3	*36.4*	5.8	38.5	10.9
33	40.8	*19.5*	21.3	18.4	24.1	*29.6*	14.6	31.8	10.1
34	4.4	10.0	*82.6*	3.0	3.6	5.8	*87.3*	3.3	4.7
35	*28.6*	17.3	34.2	19.9	*32.6*	12.6	33.0	21.9	4.0

APPENDIX C

Percent of 1977-78 and 1978-79 Grade 8 Students Correctly Reproducing Each Element of the IEA Pronunciation Test.

Item	Element Assessed	% Correct	
		77-78	78-79
4. Tout est fini.	1. (u)	97	99
	2. (i)	89	88
5. La nuit est tombée.	3. (yi)	49	48
	4. (e)	54	66
6. J'ai lu ce livre.	5. (y)	78	69
	6. (i)	96	97
7. Tu attends le train?	7. (ã)	70	84
	8. (tr)	74	58
8. Elle a deux bébés.	9. (ø)	65	46
	10. (e)	54	55
9. Donne-lui un peu d'eau.	11. (o)	53	55
10. Elle a des oeufs.	12. (ø)	44	71
11. Reviens en été.	13. (r)	82	40
	14. (liaison)	45	37
12. Voyons, c'est très beau.	15. (o)	31	33
13. C'est difficile pour les filles.	16. (l)	19	33
	17. (j)	21	27
14. On sonne.	18. (õ)	86	58
	19. (ɔn)	77	65
15. Elle a de petites mains.	20. (t)	73	63
	21. (ɛ)	61	55
16. Le garçon écrit sur le mur.	22. (õ)	81	75
	23. (y)	8	16
17. Pour lui, c'est tard.	24. (r)	73	31
	25. (r)	39	26
18. C'est fort, mais c'est bon!	26. (ɔ)	65	51
	27. (õ)	51	83
19. Elles servent la soupe.	28. (v)	49	54
	29. (p)	86	89

APPENDIX D

Percents of Students in the Grade 8 Classes of 1977-78 and 1978-79 'Agreeing' With the Five Items Making Up The French Class Anxiety Scale.

Item	1977-78 Percent*			1978-79 Percent		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree
2 I am afraid other students will laugh at me when I speak French.	26	18	56	22	20	59
7 I never feel quite sure of myself when I am speaking in our French class.	68	10	22	58	12	30
11 It embarrasses me to volunteer answers in our French class.	22	16	63	20	16	64
15 I always feel that other students speak French better than I do.	60	17	25	57	15	28
19 I get nervous and confused when I am speaking in my French class.	45	17	38	45	7	48

*% Agree = % Strongly Agree + % Moderately Agree + % Slightly Agree
% Disagree = % Strongly Disagree + % Moderately Disagree + % Slightly Disagree.

APPENDIX E

Percents of Students in the Grade 8 Classes of 1977-78 and 1978-79 'Agreeing' With the Ten Items Making Up the Attitude Toward Learning French Scale.

Item	1977-78 Percent			1978-79 Percent		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree
1 French is an important part of the school programme.	59	11	30	63	11	26
4 I would rather spend my time on subjects other than French	59	18	23	57	19	24
5 I really enjoy learning French.	38	14	48	43	14	43
8 Learning French is a waste of time.	19	13	68	25	9	66
9 I plan to learn as much French as possible.	45	12	43	52	12	36
12 I think that learning French is dull.	39	15	47	42	9	49
14 I love learning French.	24	14	62	32	14	54
17 I hate French.	40	9	52	40	6	53
22 Learning French is really great.	34	14	52	41	13	46
24 When I leave school, I shall give up the study of French entirely because I am not interested in it.	37	16	47	36	11	54

APPENDIX F

Percents of Students in the Grade 8 Classes of 1977-78 and 1978-79 'Agreeing' With the Ten Items Making Up the Attitude Toward French Canadians Scale.

Item	1977-78 Percent			1978-79 Percent		
	Agree	Neutral	Disagree	Agree	Neutral	Disagree
3 Some of our best citizens are of French-Canadian descent.	34	39	27	38	37	25
6 I would like to know more French Canadians.	32	33	35	33	35	32
10 If Canada should lose the French culture of Quebec, it would indeed be a great loss.	60	16	24	56	22	22
13 French Canadians add a distinctive flavour to the Canadian culture.	51	26	23	51	32	18
16 French Canadians have preserved much of the beauty of the old Canadian folkways.	51	34	15	51	34	16
18 The French-Canadian heritage is an important part of our Canadian identity.	57	26	17	55	28	17
20 French Canadians are a very sociable, warm-hearted and creative people.	35	46	19	36	40	24
21 The more I get to know the French Canadians, the more I want to be fluent in their language.	31	30	39	32	31	37
23 Most French Canadians are so friendly and easy to get along with that Canada is fortunate to have them.	30	41	30	31	34	35
25 English Canadians should make a greater effort to learn the French language.	52	17	31	54	15	32